



**Invest in Kids
2020–2021 Report of
Nurse–Family Partnership®
in Colorado**



Mission

Invest in Kids works alongside Colorado communities to adopt, implement, and successfully scale proven programs that have the greatest long-term impact on young children and families experiencing poverty.

For over 22 years, our team of experts has worked at every level, from the state capitol to local classrooms, to assess community need and address barriers to implementation and sustainable funding. In doing so, we help ensure a strong start for young children and their caregivers and invest in a future where all families have the opportunity to lead healthy lives. Bridging the gap between research and practice, Invest in Kids provides the support necessary for Nurse-Family Partnership®, The Incredible Years®, and Child First® to realize significant outcomes and make the largest possible difference for over 17,000 Colorado children and families each year.



Equity Commitment

Invest in Kids (IIK) is dedicated to addressing health and education disparities between Colorado children and families experiencing poverty and their higher socio-economic peers. Invest in Kids' commitment to help build a future where we can no longer predict child and family outcomes, such as healthy pregnancies, healthy child development, or school readiness based on socioeconomic status or race, remains at the forefront of our minds. We stand in solidarity with Black, Indigenous, and other people of color to fight the systemic and institutional racism that compounds these disparities.

Invest in Kids is committed to facilitating a nonpartisan, collaborative, and authentic dialogue that empowers urban and rural communities to deliver evidence-based, culturally responsive programs. It is our goal to ensure IIK is doing everything possible to be an equitable organization whose programs are indeed culturally responsive and anti-racist to best serve the children and families of Colorado.

To clarify our intentions for ourselves and our stakeholders, we share what the terms below mean to us:

- **Equity**—IIK is devoted to building practices and systems that create opportunities while eliminating disparities for under-resourced groups and individuals, particularly service and opportunity gaps based on socioeconomic status, race or ethnicity. IIK works for a future in which we can no longer predict child and family outcomes, such as healthy pregnancies, healthy child development, or social-emotional competence and school readiness, based on socio-economic status, race or ethnicity.
- **Diversity**—IIK is committed to acknowledging and valuing the power of unique and varied life experiences that are shaped by all aspects of a person's identity (including, but not limited to race, ethnicity, socioeconomic status, age, religion, gender, physical ability, sexual orientation, and geographic location). We embrace all types of diversity and strive to increase and support the socio-economic and racial/ethnic diversity of our staff, board, and volunteers because we believe these perspectives will be most valuable in helping us to understand the strengths and challenges faced by the families our programs serve.
- **Inclusion**—IIK is dedicated to incorporating and leveraging diverse backgrounds and life experiences into the fabric of our organization and programs. IIK strives to be an organization where all staff, board members, and people served by our programs feel valued and respected and have opportunities for meaningful contributions.

We understand that engaging in this work is a long-term, continuous process, and will never be completely finished. We also recognize that we can't do this work alone; we seek to engage with and learn from both existing and new partner organizations as well as the many families and communities that are central to our work.

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Invest in Kids' approach to working with communities is grounded in Implementation Science. As such, data are collected as part of a larger Decision Support Data System, one of the Implementation Drivers¹. The data collected by Nurse-Family Partnership (NFP) nurse home visitors are utilized to monitor program performance and effectiveness, and to ensure the high-quality delivery of the program with fidelity to the NFP model. The data are also used to create annual reports for funders of NFP in Colorado. The analysis and reporting of this information is completed by the NFP National Services Office and the NFP Data Analyst, a full-time employee of IIK.

This report highlights the outcomes of Colorado NFP clients and their infants, and the work performed by Invest in Kids to support NFP implementing agencies. This report will benefit Invest in Kids by supporting continued funding of the NFP program in Colorado.



Introduction



Since 1998, Invest in Kids (IIC) has worked alongside Colorado communities to adopt, implement, and successfully scale proven programs that have the greatest long-term impact on young children and families experiencing poverty. Thanks to funding from The Colorado Trust, IIC was able to adopt Nurse-Family Partnership® (NFP) as our first program. Its objective is to strengthen families and ensure a strong start for children based on findings from three randomized, controlled trials and over 40 years of longitudinal research conducted by Dr. David Olds.

Dr. Olds' research revealed that children participating in NFP exhibited fewer injuries, developed better behavior skills, and had improved school-readiness compared to their peers; mothers experienced better health and employment. Specifically, his studies found.³

- 56% reduction in child ER visits for accidents and poisonings
- 48% reduction in child abuse and neglect
- 67% reduction in behavior and intellectual problems among children at age 6
- 61% fewer arrests of moms
- 32% fewer subsequent pregnancies

For some children, their lives are disproportionately affected by structural inequities that put them at higher risk. An evidence-based community health nursing program such as Nurse-Family Partnership, provides positive support to families who face systemic barriers and challenging life circumstances.



Dr. David Olds
Founder of NFP

For every dollar invested in NFP in Colorado there is a \$7.90 cost savings to society²

Nurse-Family Partnership®



Nurse-Family Partnership (NFP) is an evidenced-based, voluntary, community health nursing program aimed at improving the lives of families with lower levels of socioeconomic status who are expecting their first child. Clients are partnered with a registered nurse early in their pregnancy and receive home visits until their child turns two. NFP focuses on first-time parents and is delivered by registered nurses with expertise in maternal/child health. It is during the first pregnancy when the best chance exists to promote and teach positive health behaviors. The three main goals of the NFP program are:



Improve pregnancy outcomes by helping pregnant people engage in good preventative health practices, including prenatal care from their health care providers, improving their diets and reducing their use of tobacco, alcohol and drugs



Improve child health and development by helping parents provide responsible and competent care



Improve the economic self-sufficiency of the family by helping parents develop a vision for their own future, plan future pregnancies, continue their education and find work

NFP National Service Office (NSO) provides training and the tools to help guide the nurse home visitor's practice. NFP NSO has developed visit-to-visit guidelines to create a framework for the visits and maintain consistency in how the program is delivered. The guidelines also assist with delivery of fundamental information to the client. Invest in Kids provides nursing leadership, ongoing nursing consultation, trainings, communities of practice to foster the sharing of best practices and offers extra support and education to new NFP nurses.

Return on investment

Why is Nurse–Family Partnership one of the best investments the public can make? IIK bases our actions on evidence. A study was conducted by Ted Miller at the Pacific Institute for Research and Evaluation to investigate the cost savings of NFP. According to the study's findings, across all levels of government (state and federal), the total cost savings to government for each family enrolled in Colorado NFP will average \$24,282.⁴

Ted Miller's study estimates the following outcomes can be achieved in Colorado by implementing NFP.

Enrolling 1,000 low-income families in NFP in Colorado prevents⁵

- 45 preterm births
- 98 closely spaced, high risk 2nd pregnancies
- 253 child maltreatment incidents
- 3 infant deaths



Invest in Kids' Value Added

In service to our mission of improving the health and well-being of Colorado's children and families, IIK plays an innovative role in our partnerships with communities to deliver evidence-based programs (EBPs). Implementation science research indicates that it takes much more than solely making the decision to adopt an EBP to ensure that it is delivered with a high level of quality and competence, and that the intended societal benefits of the program are realized. IIK is dedicated to maximizing the impact of our EBPs in Colorado by providing a strong foundation of implementation supports that helps to ensure each program's effectiveness for children and families, in both the short and long-term.

We actively work with key decision makers to help secure each program's funding. By leveraging our time and expertise to identify opportunities, we seek out everything from federal, state, and local grants to investment from private foundations and individual donors. Together, we ensure the ongoing budgetary support required for long-term success and sustainability of programs statewide.

Specific IIK activities that support high-quality delivery of NFP include:



Ensuring that community leaders and stakeholders have the knowledge, skills and support needed to sustain the program



Protecting state funding for Nurse-Family Partnership through education and advocacy



Providing ongoing support and training to nurse home visitors and their supervisors in delivering Nurse-Family Partnership to diverse communities and families



Assisting Nurse-Family Partnership teams to interpret data to support nursing practice, monitor program implementation and develop quality improvement projects



Monitoring fidelity and quality improvement projects for all implementing agencies

Highlights



Nurse-Family Partnership is an evidence-based home visitation program that partners nurses with first-time moms and their babies. Colorado NFP is sustained by 213 staff from 22 implementing agencies consisting of county public health departments, Federally Qualified Health Centers, hospitals, non-profits and a college of nursing. IIK intensively supports the staff at these implementing agencies to ensure the high-quality delivery of the program with fidelity to the NFP model.

4,671

Client served

3,971

Children served



Colorado NFP Client and Child Outcomes July 2020–June 2021

Pregnancy*

91% of babies were born full-term

89% of babies were born at a healthy weight

85% of clients were screened for depression during pregnancy

Child Health and Development

94% of clients-initiated breastfeeding

73% of infants were screened for developmental delays at 10 months

91% of toddlers were fully immunized at age two[!]

Economic Self-Sufficiency

82% of clients have not had a subsequent pregnancy at 18 months postpartum

56% of clients 18 years old at intake were working at program completion

40% of clients without a high school diploma/GED at enrollment earned a diploma/GED by program completion; 17% were still enrolled in school

*for clients who enrolled during pregnancy

! For children with immunization data

Innovations

Research

Invest in Kids has partnered with the University of Colorado Denver on a grant funded research project to study the rapid move to exclusive telehealth visits due to the pandemic. Through this research we hope to understand the impact of sudden telehealth use on client's health care utilization, client outcomes and the overall experience for both the client and nurse. The first part of the study included a survey and interviews completed by nurses and clients across the state. This data will be used to inform nursing practice and better understand the impact of telehealth on the NFP model. We expect to have the first round of initial results in the fall of 2021.



Support for Nurses during the COVID-19 Pandemic

Prior to the pandemic, telehealth was an allowable method for conducting NFP visits with clients. Telehealth was not universally embraced by all nurses and only accounted for a small percentage of visits. The pandemic required a rapid switch to exclusive telehealth visits. To help with this transition, IIK engaged a telehealth expert to provide six educational sessions to increase nurses' capacity, capability and confidence in their ongoing provision of telehealth. There was approximately a 30% increase in the use of video for conducting telehealth visits after our training sessions.

Nurses are much more adept at delivering NFP via telehealth now. NFP nurses have continued to enroll and keep clients engaged at similar rates pre-pandemic. Telehealth forces a slower pace causing fewer topics to be covered during a visit. There has been a need to prioritize and adapt the content of the program. We will continue to learn about how that pacing, and prioritization impacts outcomes.

Nurse Residency Program

Invest in Kids conducted the fourth year of the Nurse Residency Program. The Nurse Residency Program provides extra support and education for nurses new to NFP nursing practice. Through the 9-month program, nurses share challenges and successes with integrating NFP knowledge and skill into actual work with clients, while being guided by IIK's expert NFP team. At the conclusion of the program, IIK began reviewing the outcomes of the program to inform future cohorts. Utilizing surveys and interviews, we will be looking at participants' job satisfaction, retention, and overall impacts of the residency program on nursing practice.



Lillian Wald (Kimberly Hirst, NFP Referral and Community Outreach Nurse at IIK) and Florence Nightingale (Michelle Neal, NFP Program director at IIK) joined our Nurse Residency Program to teach first-hand how the history of Public Health Nursing has influenced the role and tradition of nursing in NFP.

Referral Express and Central Hub (REACH) Project

The REACH project started as a one-year pilot designed to bring cohesion and vitality to the client referral system in the Denver metro area. The pilot concluded in September 2020. The project was successful in developing a consistent, proactive outreach message and process for handling client referrals in the Denver metro area. In addition, relationships are being built with the three largest health care providers in the Denver Metro area that serve the NFP Target population to help increase referrals to NFP.

There has been an average of 75+ referrals per month since the pilot ended. Following the pilot, IIK has implemented an online referral form that eliminates the need to fax or email referrals. In addition, IIK created a referral coding and handling guidance document for all Colorado NFP implementing agencies to provide consistency in client referral handling. IIK is expanding the role of the REACH nurse to work with NFP implementing agencies all over the state to improve their outreach and referral processes. In addition, REACH is exploring partnering with our new Child First sites to also assist them with outreach.

Medicaid Billing

Colorado NFP implementing agencies have continued the pursuit of billing Medicaid for preventive counseling, tobacco cessation, depression screening and targeted case management with the support of IIK, the Office of Early Childhood at CDHS and Health Care Policy and Financing (HCPF). Thirteen of the twenty-two NFP implementing agencies have been consistently billing Medicaid for the first six months of the 2021 calendar year and earned a total of \$74,000. Two of the twenty-two NFP implementing agencies have not been able to secure a supervising physician and so are unable to bill Medicaid under current HCPF rules. Another NFP implementing agency exists in a University system and is prevented from billing Medicaid due to challenges caused by needing to track Medicaid revenue for a relatively small program in a large university system. Six of the twenty-two NFP implementing agencies are in the process of commencing billing as they work to overcome challenges related to Electronic Medical Records, leadership and fiscal changes within the agency, outstanding questions to HCPF and the need to prioritize billing after other essential functions of Public Health such as deployment related to the pandemic.

IIK continues to advocate to HCPF to get questions answered and meets regularly with assigned HCPF staff. IIK also works closely with each implementing agency's supervisor and administrator to assess, and problem solve individual agency billing challenges. It is yet to be seen as to whether billing Medicaid yields more in revenue than it costs to set up a billing system, to train staff to bill and to track billing.



Client Story



When Juli, a NFP nurse called Amy she was relieved to have a nurse available. Juli provided intervention and support for Amy. "She was very open to discussing difficult topics, Juli was helpful to ensure my child and I were safe. Juli was a lifesaver; it was so good to have a non-judgmental woman to talk to and a nurse. I have a mom who is helpful, but there are some topics that I didn't want to talk to her about, but I could talk to Juli."

Amy has a traumatic brain injury that prevents her from retaining information and has made it difficult to further her education after completing a Master Gardener course from CSU. She was laid off from her job as a landscaper due to the COVID-19 pandemic. Her husband currently works as a line cook at a local restaurant. They struggled before their child was born and even more so after. Juli helped connect Amy and her husband to a local financial center which helped them navigate their bills. According to Amy, "Juli was able to help with a car seat when we financially were so broke and could not afford anything, we could not put him in an unsafe car seat, and there are not many resources in this rural area."

Amy pursued her heart's desire with Juli's support to start her own business as a gardener. Juli applied for Amy to receive Jacquelyn Wonder Fund assistance for a computer to provide her with the technology needed to get her business up and running. Amy now runs her own landscape business out of her home assisting people in the community to build beautiful gardens. "I'm going to be a better mom than if I didn't have the program, I have so many tools and skills now. The whole program made a difference, and I couldn't imagine doing this without Juli."

Outcomes



Data Collection

Nurse home visitors utilize forms required by the Nurse-Family Partnership program to collect data. Data are collected by the nurse home visitors asking the client each question and includes demographics information about the families served, screenings conducted, utilization of community and government services and program outcomes. The data collected are entered into the NFP National Service Office (NFP NSO) data collection system. Implementing agencies can access this data through reports provided by the NFP NSO.

Data collected are used to supports nursing practice, document services provided, track families progress in attaining program goals, and measure program effectiveness and performance.

The NFP NSO extracts the data to produce a standardized set of reports for nurse home visitors and their supervisors to use. These reports were created to support caseload management, monitoring program implementation and client outcomes.



Colorado NFP Client and Child Outcomes July 2020–June 2021

Pregnancy Outcomes*



91% of babies were born full-term
Premature births can have long-term effects on the child including behavioral problems, intellectual and developmental disabilities and health problems.



89% of babies were born at a healthy weight
Healthy babies are better equipped to learn and build core capabilities necessary for school readiness.



85% of clients were screened for depression during pregnancy
Maternal depression can impact the health and development of a child.

Child Health and Development



94% of clients-initiated breastfeeding
52% of clients continue to breastfeed at infant age 6 months
Breast milk benefits the infant's growth and development, immune system and general health.



73% of infants were screened for developmental delays at 10 months
It's important to identify possible delays in developmental milestones early and get support.



91% of toddlers were fully immunized at age two[†]
Immunizations helps to protect the infant from specific diseases.

Economic Self-Sufficiency



82% of clients have not had a subsequent pregnancy at 18 months postpartum
Birth space can have an impact on the mother's ability to return to school or work.



56% of client 18 years old at intake were working at program completion
Working Improves the economic self-sufficiency of the family.



40% of clients without a high school diploma/GED at enrollment earned a diploma/GED by program completion; 17% were still enrolled in school
Completing high school/GED helps with the economic self-sufficiency of the family.

*for clients who enrolled during pregnancy
[†]for children with immunization data

Who we serve

NFP seeks to serve families in Colorado who face significant barriers to having a healthy pregnancy such as people who have a lower socioeconomic status, are underserved, and experiencing a disproportionate impact of systemic inequalities

Clients in the Colorado NFP program are:

First-time parents

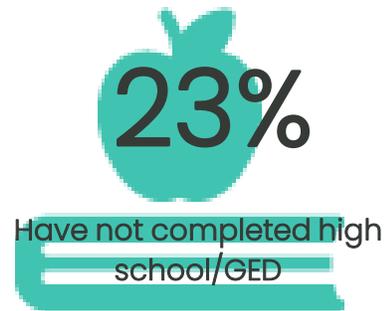
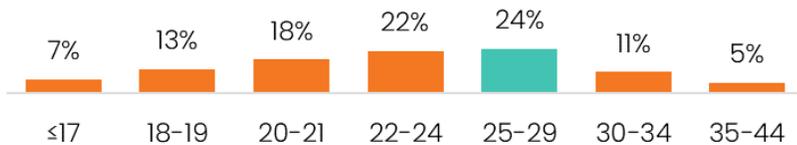
- The best chance to promote and teach positive health and development behaviors exists during a first pregnancy.

Low-income (≤200% of the Federal Poverty Level)

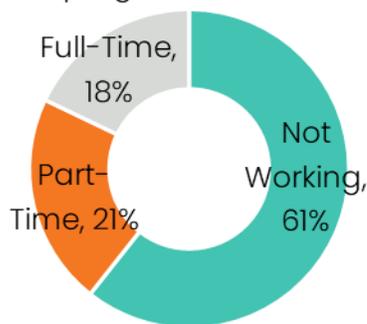
- Dr. David Olds’ research has shown that lower-resourced clients receive more benefit from the program than women with higher incomes.

Colorado NFP Served 4,671 clients

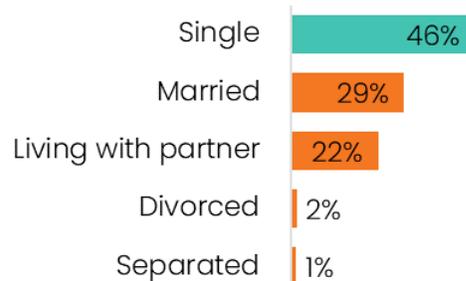
The majority of clients were in their 20's when they enrolled in NFP. And the highest percentage were between 25-29.



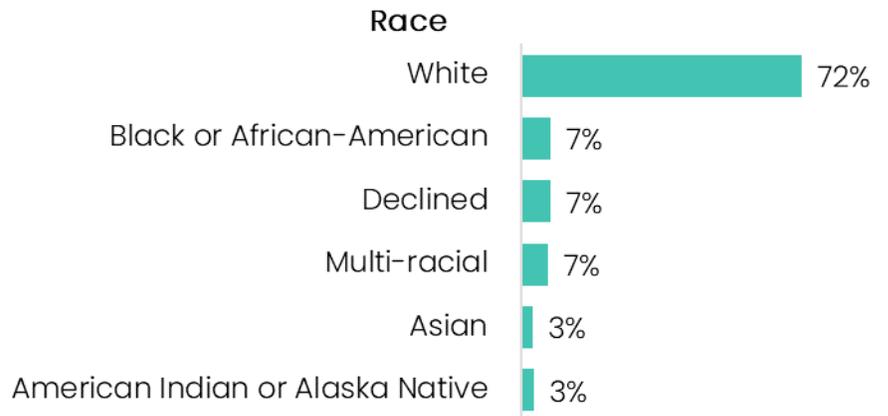
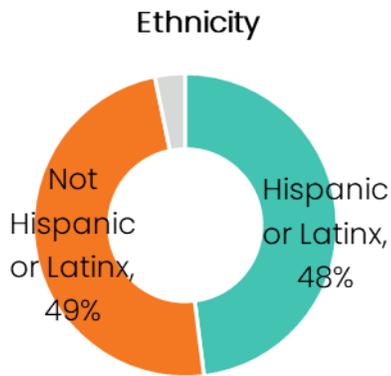
The majority of NFP clients were **not working** when they enrolled in the program.



The majority of NFP clients are **single** when they enrolled in the program



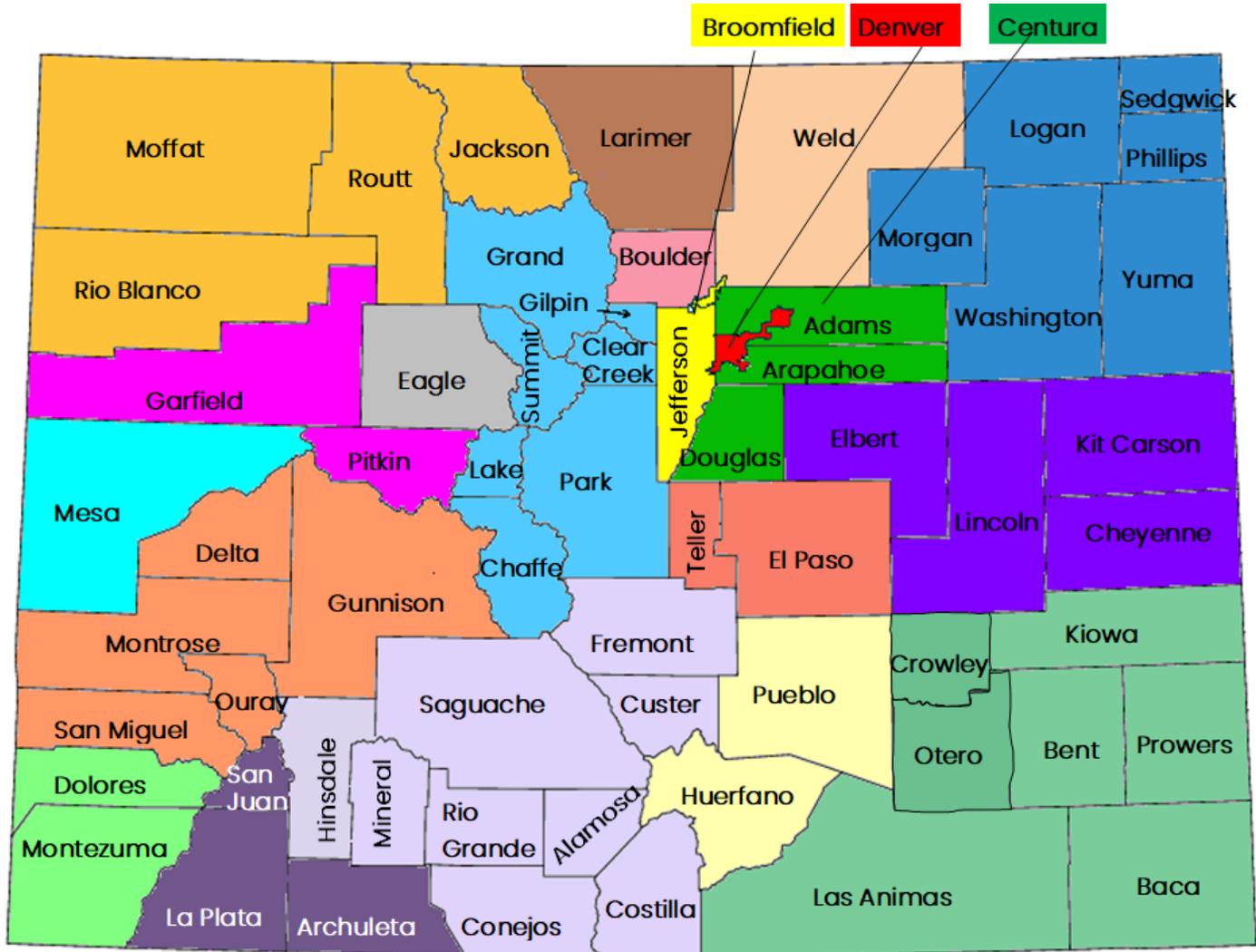
Ethnicity and race are asked as separate questions following the format stipulated by the Federal Government (US Census and Office of Management and Budget).



NFP Locations



Twenty-two agencies serve all 64 counties in Colorado



	Northwest Colorado Health		Larimer County Department of Public Health and Environment		Weld County Department of Public Health and Environment
	Regional Home Visitation Program dba Baby Bear Hugs		Family Visitor NFP		Eagle County Health and Human Services
	Intermountain NFP		Boulder County Health Dept.		Jefferson County Health Dept.
	Denver Health & Centura Health		Tri-County Health & Centura Health (Adams)		Kit Carson Health and Human Services
	Mesa County Department of Public Health and Environment		Montrose County Dept. of Health and Human Services		Valley-Wide Health Systems, Inc.
	El Paso County Dept. of Public Health & Environment & Beth-El College of Nursing		Pueblo Community Health Center		Prowers County Nursing Service
	Montezuma County Health Dept		San Juan Basin Health Dept. through Healthy Kids		

Fidelity



Nurse-Family Partnership follows 19 model elements for implementing the program. When the program is implemented in accordance with these model elements, implementing agencies have a high level of confidence that results will be comparable to those measured in the research trials.

Ensuring we continue to have an impact relies on following a blueprint with every client of what was done in the research trials. The 19 model elements at the core of the NFP program serve as this blueprint. We use "fidelity" to refer to how closely a given NFP implementing agency adheres to those model elements, thereby replicating the practices proven to lead to the best outcomes for clients.

What makes NFP unique is the wealth of evidence proving that every dollar spent on it truly has an impact. IIK's promise to sustain that impact means we must ensure that Colorado's implementation of the program is always true to the model elements. We measure fidelity so we can say with confidence that the services NFP provides fosters the best interest of clients in ways proven to be most effective.



Program Staff



Michelle Neal MS, RN – Program Director



Allison Duran BSN, RN – Nurse Consultant



Kimberly Hirst MPH, RN – Referral and Community Outreach Nurse



Matthew Manning – Project Manager



Staci Morley-Young – Data Analyst



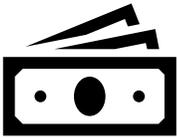
Allison Mosqueda MS, RN – Nurse Consultant

The program staff's work is made possible with invaluable support from Executive Director, Lisa Hill, and the Implementation, Development, Communications, Operations and Finance staff at IIK.

Appendices

A. Funding

Funding for the NFP program in Colorado is provided by state Tobacco Master Settlement funds, Medicaid reimbursement and federal home visiting funds. The Tobacco Master Settlements funds finances 24 of the 27 teams that implement NFP in Colorado. The remaining three teams receive funding through the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program. The MIECHV Program is administered by the Health Resources and Services Administration (HRSA) a division of the U.S. Department of Health and Human Services.



Tobacco Master Settlement funds (state fiscal year July 1, 2020–June 30, 2021)
budget \$ 21,612,019



MIECHV funding (federal fiscal year October 1, 2020–September 30, 2021)
budget \$ 2,506,686

B. Partners

IKK began the replication of NFP in Colorado by working in partnership with local communities to identify, introduce and then to implement the program with fidelity to ensure success. All NFP implementing agencies are required to have local advisory boards which grew out of these initial partnerships. These advisory boards provide a support network for NFP staff and clients, facilitate awareness of NFP in the community, aid in developing relationships with referral sources and service providers, assess and respond to program implementation challenges, identify client resources and gaps in client services and generate the support needed to sustain NFP over time.

The management of the NFP in Colorado is accomplished with a four-partner team:

<p>Nurse-Family Partnership National Services Office's role in Colorado</p> <ul style="list-style-type: none"> • Initial nurse and supervisor training • Visit-to-visit guidelines • Marketing resources and materials • Data collection system • Program implementation and outcome reports 	<p>Invest in Kids' role in Colorado</p> <ul style="list-style-type: none"> • Community awareness • Program advocacy • Site development and expansion • Clinical support and consultation • Program implementation support • Quality improvement management 
<p>Colorado Department of Human Services' role in Colorado</p> <ul style="list-style-type: none"> • Fiscal agent • Annual grant application • Annual state Tobacco MSA appropriation • Contracts including funding conditions • Finances and implementing agency budgets • Federal funding and associated contracts 	<p>College of Nursing, University of Colorado Anschutz Medical Campus' role in Colorado</p> <ul style="list-style-type: none"> • The Nurse Home Visitor Act requires that the University of Colorado select, evaluates and monitors sites. The University subcontracts these responsibilities to the NFP National Services Office and Invest in Kids. 

C. References

1. Fixsen, D., Blase, K., & Van Dyke, M. (2019). *Implementation Practice & Science*. Chapel Hill, NC: Active Implementation Research Network.
2. Societal Return on Investment in Nurse-Family Partnership Services in Colorado. Ted R Miller, PhD, developed this fact sheet and the cost model underpinning it. This calculator was funded in part by NIDA grant 1-R01 DA021624. Fact Sheet Date: 2/21/2019
3. Nurse-Family Partnership. Research Trails and Outcomes: The Gold Standard of Evidence. Available at <https://www.nursefamilypartnership.org/wp-content/uploads/2020/01/Research-Trials-and-Outcomes.pdf> Accessed on 6/5/2020.
4. Miller, T.R. (2015). Projected outcomes of Nurse-Family Partnership home visitation during 1996-2013, USA. *Prevention Science*. 16 (6). 765-777. This number relies on a state-specific return on investment calculator derived by Dr. Miller from published national estimates to project state-specific outcomes and associated return on investment. The calculator is revised periodically to reflect major research updates (latest revision: 12/22/2018).
5. Life Status and Financial Outcomes of Nurse-Family Partnership in Colorado. Ted R Miller, PhD, developed this fact sheet and the cost model underpinning it. This calculator was funded in part by NIDA grant 1-R01 DA021624.